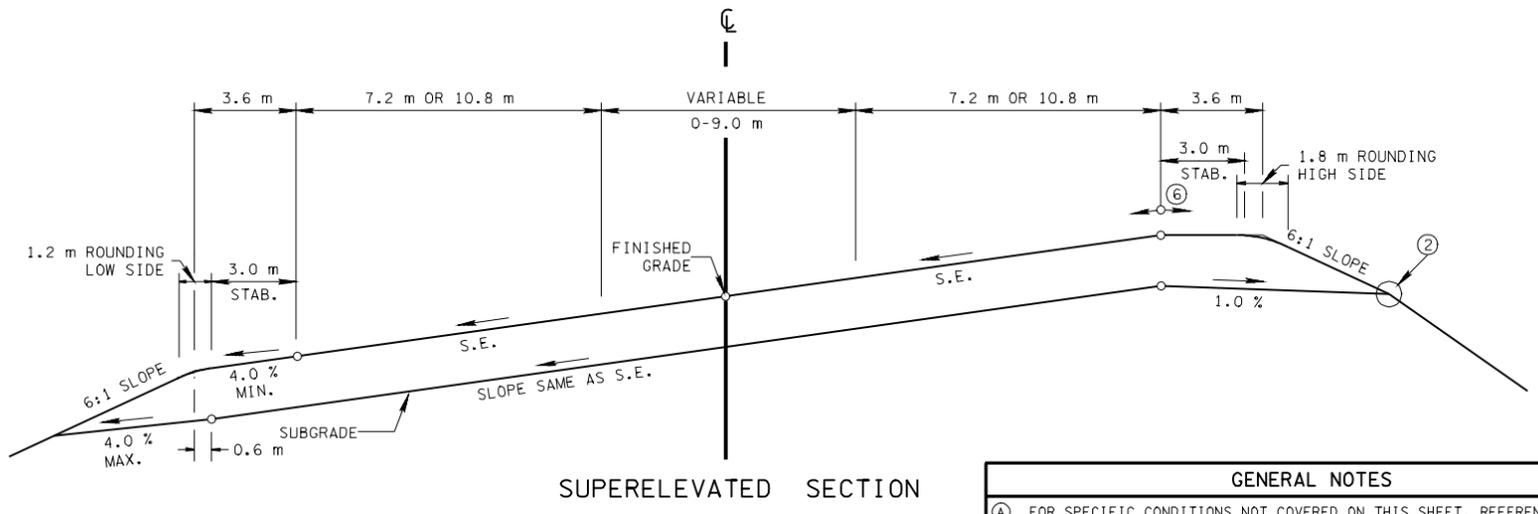
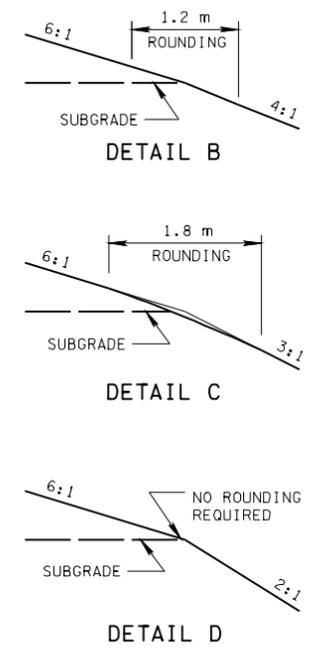
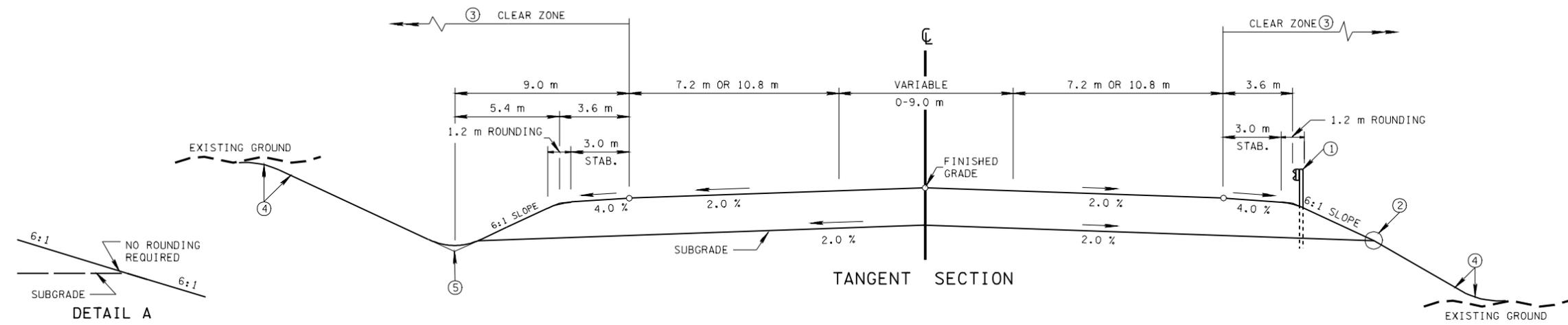


- REV. 11-1-95: CHANGED TO METRIC.
- REV. 7-29-96: CHANGED DISTANCE FROM EDGE OF SHOULDER TO CENTER OF CUT DITCH.
- REV. 3-20-02: ADDED SPECIAL NOTE.
- REV. 3-31-03: CHANGED EFFECTIVE DATE IN SPECIAL NOTE.



SPECIAL NOTE
THIS DRAWING IS NOT TO BE UTILIZED FOR NEW DESIGN PROJECTS BEGUN AFTER OCTOBER 1, 2002.

- GENERAL NOTES**
- (A) FOR SPECIFIC CONDITIONS NOT COVERED ON THIS SHEET, REFERENCE SHOULD BE MADE TO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" 1994.
 - (B) PAGE NUMBERS REFERRED TO ON THIS DRAWING ARE FROM THE ABOVE REFERENCE.
 - (C) REFERENCE SHOULD ALSO BE MADE TO THE AASHTO "ROADSIDE DESIGN GUIDE".
 - (D) DESIRABLE RIGHT-OF-WAY IS SLOPE LINES PLUS 3.0 m.
 - (E) IF NO ABOVE GROUND UTILITIES ARE INVOLVED, MINIMUM RIGHT-OF-WAY SHALL BE TRAVELED WAY PLUS CLEAR ZONE.
 - (F) IF ABOVE GROUND UTILITIES ARE INVOLVED, MINIMUM RIGHT-OF-WAY SHALL BE SUFFICIENT TO ACCOMMODATE THE UTILITIES OUTSIDE THE CLEAR ZONE.
 - (G) ALL NEW AND REHABILITATED BRIDGES SHALL BE DESIGNED FOR MS-18 LOADING. THE MINIMUM CLEAR WIDTH FOR NEW AND REHABILITATED BRIDGES SHALL BE EQUAL TO THE FULL WIDTH OF THE APPROACH ROADWAY, CURB-TO-CURB OR FULL SHOULDER WIDTH AS APPLICABLE.
 - (H) BRIDGES TO REMAIN IN PLACE SHOULD HAVE ADEQUATE STRENGTH AND AT LEAST THE WIDTH OF THE TRAVELED WAY PLUS 0.6 m CLEARANCE ON EACH SIDE, BUT SHOULD BE CONSIDERED FOR ULTIMATE WIDENING OR REPLACEMENT IF THEY DO NOT PROVIDE AT LEAST 1.0 m CLEARANCE ON EACH SIDE OR ARE NOT CAPABLE OF MS-18 LOADINGS. AS AN INTERIM MEASURE, ALL BRIDGES THAT ARE LESS THAN FULL WIDTH SHOULD BE CONSIDERED FOR SPECIAL NARROW BRIDGE TREATMENTS SUCH AS SIGNING AND PAVEMENT MARKING.

⑨ DESIGN SPEED (km/h)

LEVEL TOPO	100
ROLLING TOPO	80
MOUNTAINOUS TOPO	60

- FOOTNOTES**
- ① SEE GUARDRAIL STANDARD DRAWINGS FOR TYPICAL GUARDRAIL PLACEMENT.
 - ② SEE DETAIL A, B, C, OR D ON THIS SHEET FOR ROUNDING.
 - ③ MINIMUM CLEAR ZONE WIDTH IS 3.0 m FOR 60 km/h OR LESS. FOR 80 km/h DESIGN AND GREATER THE CLEAR ZONE WIDTH SHALL BE DETERMINED FROM STANDARD DRAWING RDM-S-11. FOR URBAN DESIGN SEE PAGE 477-478.
 - ④ SEE STANDARD DRAWING RDM-S-11 FOR FILL AND CUT SLOPE TABLES, ROUNDING ON TOP OF CUT SLOPES AND TOE OF FILL SLOPES, AND SPECIAL ROCK CUT TREATMENT.
 - ⑤ SEE STANDARD DRAWING RDM-S-11A FOR ROUNDING OF ROADSIDE DITCH SLOPES.
 - ⑥ THE SLOPES OF THE SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7.0 %.
 - ⑦ "K" VALUE IS A COEFFICIENT BY WHICH THE ALGEBRAIC DIFFERENCE IN GRADE MAY BE MULTIPLIED TO DETERMINE THE LENGTH IN METERS OF THE VERTICAL CURVE.
 - ⑧ ANY LENGTH OF STOPPING SIGHT DISTANCE WITHIN THE RANGE OF VALUES ESTABLISHED ON PAGE 462, TABLE VI-2A IS ACCEPTABLE FOR A SPECIFIC SPEED. HOWEVER, VALUES APPROACHING OR EXCEEDING THE UPPER LIMIT OF THE RANGE SHOULD BE USED AS THE BASIS FOR DESIGN WHEREVER CONDITIONS PERMIT.
 - ⑨ RURAL ONLY PAGE 461, TABLE VI-1 FOR URBAN DESIGN SEE PAGE 471-472.

DESIGN STANDARDS (FOR GIVEN DESIGN SPEED)		DESIGN SPEEDS (km/h)								
		30	40	50	60	70	80	90	100	110
MINIMUM RADIUS (m) 4.0 % MAX. S.E.		35	60	100	150	215	280	375	490	635
MINIMUM RADIUS (m) 6.0 % MAX. S.E.		30	55	90	135	195	250	335	435	560
MINIMUM RADIUS (m) 8.0 % MAX. S.E.		30	50	80	125	175	230	305	395	500
MINIMUM RADIUS (m) 10.0 % MAX. S.E.		25	45	75	115	160	210	275	360	455
MAXIMUM RURAL GRADES (%) (PAGE 463, TABLE VI-3)	LEVEL TOPO	7	7	7	7	7	6	6	5	4
	ROLLING TOPO	10	10	9	8	8	7	7	6	5
	MOUNTAINOUS TOPO	12	11	10	10	10	9	9	8	6
MAXIMUM URBAN GRADES (%) (PAGE 463, TABLE VI-3)	LEVEL TOPO	9	9	9	9	8	7	7	6	5
	ROLLING TOPO	12	12	11	10	9	8	8	7	6
	MOUNTAINOUS TOPO	14	13	12	12	11	10	10	9	7
⑧ MINIMUM STOPPING SIGHT DISTANCE (m)		29.6	44.4	57.4-62.8	74.3-84.6	94.1-110.8	112.8-139.4	131.2-168.7	157.0-205.0	179.5-246.4
⑦ MINIMUM "K" VALUE	CREST VERTICAL CURVE	3	5	9-10	14-18	22-31	32-49	43-71	62-105	80-151
	SAG VERTICAL CURVE	4	8	11-12	15-18	20-25	25-32	30-40	37-51	43-62
SUPERELEVATION		SEE STANDARD DRAWINGS RDM-SE-2 & RDM-SE-3								



ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

□ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DESIGN STANDARDS
4-6 LANE COLLECTOR
HIGHWAYS WITH
FLUSH MEDIANS